PTO/SB/05 (01-04)
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UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	PD-02W054				
First Inventor	Thomas L. Obert				
Title	APPARATUS AND METHOD				
Express Mail Lahel No.	EL 278402515 US				

		Mail Stop Patent	Application				
	APPLICATION ELEMENTS	Mail Stop Patent A					
See MPED	chapter 600 concerning utility patent application contents.	ADDRESS 10. P.O. Box 1450	_				
Jee Wil Er	crupter 600 concerning unity patent application contents.	Alexandria VA 22	2313-1450				
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	ransmittal Form (e.g., PTO/SB/17) it an original and a duplicate for fee processing)	 CD-ROM or CD-R in duplicate, la Computer Program (Appendix) 	arge table or				
	ant claims small entity status.	8. Nucleotide and/or Amino Acid Seque	unce Submission				
	7 CFR 1.27.	(if applicable, all necessary)	Tice Submission				
	fication [Total Pages 21]	a. Computer Readable Form	cince Submission 0.141 (CRF) 171				
	red arrangement set forth below)	• • • • • • • • • • • • • • • • • • • •	40				
	riptive title of the invention	 b. Specification Sequence Lis 					
	s Reference to Related Applications ment Regarding Fed sponsored R & D	·	, 0				
	rence to sequence listing, a table,	i. LL CD-ROM or CD-R (2	copies); or				
	computer program listing appendix						
	ground of the Invention Summary of the Invention	ii. 🔲 Paper					
	Description of the Drawings (if filed)	c. Statements verifying identi	ity of above conies				
- Detai	led Description	c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS					
- Claim		ACCOMPANTING APPLIC	ATION PARTS				
- Abstr	ract of the Disclosure	9. Assignment Papers (cover she	t - Q - d t / - \ \				
4. V Drawii	ng(s) (35 U.S.C. 113) [Total Sheets7]	9. Assignment Papers (cover she	Power of				
		(when there is an assignee)	Attorney				
Oath or Dec	• — — •	11. English Translation Document					
a. 🗸 Ne	wly executed (original or copy)	12. Information Disclosure	Copies of IDS				
, – 0.	(a.a. a. a.i.a. a.a.ii.a.ti.a. (07.0ED 4.00(d))	Statement (IDS)/PTO-1449	Citations				
	py from a prior application (37 CFR 1.63(d))	13. Preliminary Amendment	•				
(101	r continuation/divisional with Box 18 completed)	14. Return Receipt Postcard (MPE					
. —	DELETION OF INVENTOR(S)	(Should be specifically itemized					
·· 🗀	Signed statement attached deleting inventor(s)	15. Certified Copy of Priority Document (if foreign priority is claimed)	ment(s)				
	name in the prior application, see 37 CFR	16. Nonpublication Request under	35 ILS C 122				
	1.63(d)(2) and 1.33(b).	(b)(2)(B)(i). Applicant must atta					
e	ligation Data Shoot, Soc 27 CED 1.76	or its equivalent					
6. Appl	lication Data Sheet. See 37 CFR 1.76	17. Other: MAILING.CERTIFICATI	E				
18. If a CONTI	INUING APPLICATION, check appropriate box, and su	pply the requisite information below and in the	e first sentence of the				
	llowing the title, or in an Application Data Sheet under						
Contin	nuation Divisional Contin	ation-in-part (CIP) of prior application No.: .					
Prior application i	information: Examiner	Art Unit:					
For CONTINUAT	TION OR DIVISIONAL APPS only; The entire disclosure of	he prior application, from which an oath or decla					
	d a part of the disclosure of the accompanying continuati						
The incorporation	on can only be relied upon when a portion has been inadv		arts.				
	19. CURRESPO	IDENCE ADDRESS					
Custon	ner Number:	OR Corresponde	ence address below				
Name	THOMAS J. FINN, ESQ., RAYTHEON COMPANY						
	EO/E4/N119, P.O. BOX 902						
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Country		ICA.	Fax 520-794-3268				
		020 704 7000	323 734 0230				
Name (Print/Ty	(pe) THOMAS J. FINN, ESQ.	Registration No. (Attorney/Agent) 48,06					
Signature	1/lomas 1	Date	e 4/2/04]				

This collection of information is required by 37 CFR 1,33(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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TOTAL AMOUNT OF PAYMENT

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PD-02W054

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FEE TRANSMITTAL for FY 2004 Effective 10/01/2003. Patent fees are subject to annual revision.	Complete if Known							
	Application Number							
	Filing Date	HEREWITH						
	First Named Inventor	Thomas L. Obert						
	Examiner Name							
Applicant claims small entity status. See 37 CFR 1.27	Art Unit							

(\$) 810.00

TOTAL AMOUNT OF PAYMENT (\$) 810.00		Attorn	ey Do	cket N	lo. PD-02W054	
METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check Credit card Money Other None	3. A	DDITI	ONAL	. FEE	S	
✓ Deposit Account:	<u>Large</u>	Entity	Small	Entity		
Deposit 50,0000	Fee			Fee (\$)	Fee Description	D-:-I
Account 50-0888	1051	(\$) 130	2051	• • •	Surcharge - late filing fee or oath	Fee Paid
RAYTHEON COMPANY Name		50	2052		Surcharge - late provisional filing fee or	
		120	1052		cover sheet Non-English specification	
The Director is authorized to: (check all that apply)		130 2,520	1053 1812 2		For filing a request for ex parte reexamination	
Charge fee(s) indicated below Credit any overpayments		920*	1804	.,	Requesting publication of SIR prior to	
Charge any additional fee(s) or any underpayment of fee(s)		520	1004	320	Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.		1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	420	2252	210	Extension for reply within second month	
Large Entity Small Entity	1253	950	2253	475	Extension for reply within third month	
Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$)	1254	1,480	2254	740	Extension for reply within fourth month	
1001 770 2001 385 Utility filing fee	1255	2,010	2255	1,005	Extension for reply within fifth month	
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appeal	
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 770.00	1452	110	2452	55	Petition to revive - unavoidable	
		1,330	2453	665	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,330	2501	665	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	1502	480	2502	240	Design issue fee	
Total Claims 20 -20** = -0- X 18 = -0-	1503	640	2503	320	Plant issue fee	
Claims 3 - 3** = [-0- X 00 1-0-	1460	130	1460	130	Petitions to the Commissioner	
Multiple Dependent =	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Small Entity Fee Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt	
Code (\$) Code (\$)	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1204 86 2204 43 ** Reissue independent claims over original patent	1801	770	2801	385	Request for Continued Examination (RCE)	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	` ` <u> </u>	
770.00	Other	fee (sp	ecify) _			
SUBTOTAL (2) (\$) //U.UU **or number previously paid if greater. For Reissues, see above	*Redu	ced by	Basic F	Filing F	ee Paid SUBTOTAL (3) (\$) 40.00	

(Complete (if applicable)) SUBMITTED BY Registration No. Name (Print/Type) Thoma/s J. Finn 48,066 Telephone 520-794-7980 (Attorney/Agent) No 2/04 Date Signature

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PD-03W054

by

Thomas L. Obert, Kenneth W. Brown, Alan A. Rattray, John W. Gerstenberg, James R. Gallivan

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